03.01-12/05/94-00752

Baker Environmental, Inc.
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December 5, 1994

Commander
Atlantic Division
Naval Facilities Engineering Command
1510 Gilbert Street (Bldg. N-26)
Norfolk, Virginia 23511-2699

Attention: Mr. Gregory Hatchett
Code 1822

Subject: Contract N62470-89-D-4814
Navy CLEAN, District III
Contract Task Order (CTO) 0267
Response to USEPA, VDEQ and LANTDIV Comments
Draft Work Plan for Site Screening Areas 2, 17, 18 and 19
Naval Weapons Station Yorktown, Yorktown, Virginia

Dear Mr. Hatchett:

Baker Environmental, Inc. (Baker) has reviewed USEPA Region III, VDEQ and LANTDIV comments regarding the Draft Final Work Plan for the above-referenced CTO. Responses to these comments are provided in Attachment A (USEPA Comments), Attachment B (VDEQ Comments) and Attachment C (LANTDIV Comments). The comment letters are provided for your convenience in Attachment D. The responses are included on the enclosed disc under the file name "DWPRESP".

Baker will submit the Draft Final Work Plan on December 15, 1994.

Baker appreciates the opportunity to serve LANTDIV on this important project. If you have any questions regarding this submittal, or would like further information, please contact me at (412) 269-2038 or Mr. Richard F. Hoff (Activity Coordinator) at (412) 269-2099.

Sincerely,

BAKER ENVIRONMENTAL, INC.

Donald C. Shields
Project Manager

DCS/ldq

cc: Mr. Jeff Harlow (WPNSTA)
Mrs. Brenda Norton, P.E. (Code 1822)
Ms. Lee Anne Rapp (w/out attachments)
Ms. Ollie Glodis (w/out attachments)

Attachment A

Response to Comments Submitted By USEPA Region III on the Draft Work Plan for The Site Screening Process at SSAs 2, 17, 18 and 19 Naval Weapons Station Yorktown

I. Comment Letter Dated October 31, 1994

General Comments

1. UST locations at SSA 17 and 18 will be identified on the site maps.

2. One soil boring will be added as a background location northwest of the perimeter fence. Only one surface soil sample will be collected along the north trace of the perimeter fence. The text, Table 4-2 and Figure 4-2 will be modified to reflect this.

3. An additional surface soil sample will be collected at a background location east of the perimeter fence. Subsurface soil samples were collected during a previous investigation ("Soil Assessment Report For Site Screening Area 18, Building 1816, Mark 48 Waste Otto Fuel Tank" Baker, 1994). Results of these analyses will be incorporated into the report for this SSA.

4. Surface water and sediment samples will be collected at the same sampling stations. Figure 4-4 and Table 4-4 will be revised to reflect this. Total numbers of environmental samples for SSA 19 are as follows:

   - Hydropunch - 6
   - Surface Water - 11
   - Sediment - 22 (11 stations x 2 samples)
   - Surface Soil - 6 (6 soil borings x 1 surface sample per boring)
   - Subsurface Soil - 12 (6 soil borings x 2 subsurface samples per boring)

The color scheme for Figure 4-4 will be adjusted to improve clarity of the sampling locations.

5. Six hydropunches will be advanced at SSA 19. One hydropunch will be installed at a background location upgradient (south) of site operations. One surface and two subsurface soil samples will be collected from each hydropunch soil boring. Table 4-4 will be revised to reflect this.

Specific Comments

1. A discussion of removal activities conducted by OHM will be included in the Site Screening Process Report. Areas of backfilling or regrading resulting from the removal action at SSA-2 will be considered during sampling activities. Soil samples collected in these areas will be collected below regraded or backfilled material to insure that original site material is being sampled.

2. The text will be revised to indicate that the tank system failed a hydrostatic integrity test.

3. Limited field sampling and waste characterization analysis of soil surrounding the debris piles at SSA 2, was conducted in support of the removal action design. The Final Action Memorandum describing these activities will be referenced in the text.

4. The text will be revised to reflect that 2 - nitrodiphenylamine and dibutyl sebacate will be considered in the risk screening.

5. The text will be revised to indicate that Residential Soil Risk Based Screening COC Table values will be used for evaluation.

6. Low level detections are identified as contaminants detected below their corresponding RBC. Selection of COPCs will be based on numerical results, without consideration of upgradient vs. downgradient location. The SSP is designed to determine if this site is a candidate for further study (i.e. RI/FS). Upgradient vs. downgradient source area issues will be evaluated as part of the SSP and would be further evaluated as part of any subsequent RI/FS process.

7. Agreed. Please refer to the response to Specific Comment 1.

8. Three hydropunch soil borings will be advanced at SSA-2. One surface and two subsurface soil samples will be collected from each boring. The text will be revised to reflect that the total number of environmental samples that will be collected at SSA-2 are as follows:

   - hydropunch (groundwater) - 3 samples
   - surface soil - 6 samples (3 soil borings and 3 surface sampling stations)
   - subsurface soil - 6 samples (3 soil borings x 2 samples per boring)

   Hydropunch/soil boring samples will also be collected as part of the SSP at SSA 19. The background Hydropunch/soil boring at SSA-19 will serve as a background point for SSA 2.

9. The use of a TIMCO™ Insta-Pack® is proposed for use with each hydropunch/temporary peizometer. The Insta-Pack® is a PVC screen -within -a- screen unit that is filled in the field with clean sand or gravel. A diagram of this unit is included as Figure A-1.

   The major advantage of this device is that it is constructed of the same materials as standard monitoring wells and peizometers (PVC). This alleviates any concern regarding absorption and/or absorption of contaminants that could be raised by the use of a filter-sock or other similar commonly used filter fabrics.

10. There are seven existing monitoring wells on site. The text will be revised to reflect that the seven wells will be sampled as part of this investigation.

11. The text will reference Section 3.26 (Investigation Derived Wastes) of the Master Field Sampling Plan for WPNSTA Yorktown.

12. The text will be corrected in response to this comment.

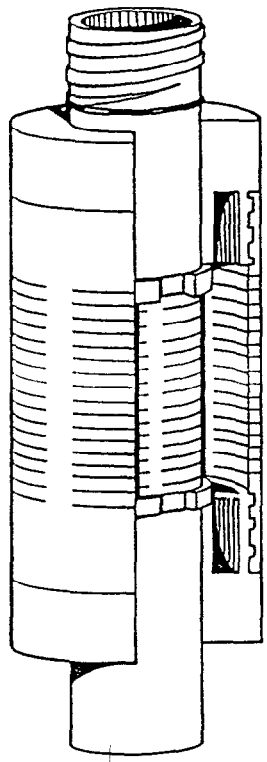
13. Please refer to the response to General Comment 4. The number at surface water samples to be collected, by pond, are as follows:

    Pond 10A - 3 surface water samples
    Pond 11 - 4 surface water samples
    Pond 12 - 4 surface water samples

14. Please refer to the response to General Comment 4 and Specific Comment 13.

15. Six hydropunch samples will be collected at SSA-19. The text will be revised to reflect this.

16. The locations of detonation holes 1 and 2 will be included on Figure 4-4.



Insta-Pack

TIMCO™ Insta-Pack®

TIMCO™ Manufacturing Inc. introduces the TIMCO™ Insta-Pack®, for use in monitoring and recovery wells, in situations where a normal filter pack cannot be easily installed (horizontal wells, heaving sands, silty or fine grain soil conditions). The Insta-Pack® is a screen within a screen unit, allowing the user to custom fill the Insta-Pack® in the field, (eliminating costly shipping charges), with a uniform, clean sand or gravel.

The Insta-Pack® is available in schedule 40 or 80 PVC, with inner well screen diameters from 1" to 6" and in 5', 10' or 20' lengths. The Insta-Pack® is available in either regular (.20" spacing) or high flow (.10" spacing) slot configurations. Slot widths range from .006" to .250". The ASTM F480 thread design is standard, but other thread designs are possible. Points or plugs can be installed.

The TIMCO™ Insta-Pack® is solvent free, with flush thread construction for ease of assembly and disassembly. Absolutely no glues or adhesives are used. TIMCO™ PVC screens are ink free, essentially free of loose materials, made from NSF approved materials, and meet applicable ASTM standards.

Figure A-1

Attachment B

Response to Comments Submitted By VDEQ on the Draft Work Plan for The Site Screening Process at SSAs 2, 17, 18 and 19 Naval Weapons Station Yorktown

I. Comment Letter Dated November 18, 1994

Comments

1. Soil analytical parameters for previous investigations at SSA-17 will be included in Section 2.2.2.

2. "Regulatory Level" refers to the maximum concentration for toxicity characteristic, as presented in 40 CFR 261.24. This reference will be added to Table 2-1.

3. An Action Memorandum assessing site characterization data for soil concluded that a removal action is to be taken for the Mark 46 Torpedo Shop Waste Otto Fuel Tank (Environmental and Safety Designs Inc., 1994). This assessment was developed in accordance with Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), 42 U.S. Code Section (USC) 9601 et seq. and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) 40 Code of Federal Regulations (CFR) Part 300. This removal action decision is supported by the attachments and the documents in the administrative record. The Commonwealth of Virginia and U.S. Environmental Protection Agency (USEPA) Region III have reviewed and concurred with the engineering evaluation and cost analysis for the removal action.

4. The affinity of detected compounds for solids/particulates will be evaluated in the COPC Selection Process.

5. COPC selection will be conducted in accordance with the SSP guidelines developed by VDEQ, USEPA Region III and the Navy. The SSP is designed to determine if this site is a candidate for further study (i.e. RI/FS).

6. This verbage was directly from EPA Region III guidelines for the purposes of the SSP. Areas not considered as hot spots would have the following characteristics:

   - No visible (or other field) evidence of contamination
   - Not located in an area of active or inactive processes of concern
   - Detected contaminant concentrations are less than RBCs

7. In accordance with USEPA Region III guidelines, chemicals may be reincluded as COPCs if certain conditions exist which warrant chemical reinclusion such as the potential for bioaccumulation or exceedences of Federal or Commonwealth standards or criteria.

8. The inhalation pathway will not be considered in the SSP. Risk will be evaluated as presented in the Site Screening Process Guideline Document (Baker, 1994). The purpose of the SSP is to determine if the site is a candidate for further study (i.e. RI/FS). A more extensive baseline risk assessment would be conducted as part of the RI/FS process.

9. BCFs will be calculated during the SSP using the octanal water partition coefficient for the compound of interest. The purpose of the SSP is to determine if the site is a candidate for further study (i.e. RI/FS). Biota sampling may be conducted as part of any subsequent RI/FS process, if appropriate.

10. In determining the ecological index, Virginia's water quality standard for the protection of "all other surface waters" will be used in place of the chronic water quality criterion.

11. The UST location will be included on Figure 4-2.

12. The UST location will be included on Figure 4-3 The figure will be enlarged so that it is more legible.

13. The locations selected are optimal given the size constraints of the ponds at SSA-19.

14. Six hydropunch/soil borings will be advanced at SSA-19. The text will be revised to reflect this.

Attachment C

Response to Comments Submitted By LANTDIV on the Draft Work Plan For The Site Screening Process at SSAs 2, 17, 18 and 19 Naval Weapons Station Yorktown

I. Comment Memorandum dated November 21, 1994

Comments

1. The text will indicate whether groundwater metals analysis from previous investigations are total or dissolved.

2. This feature is a gulley in which surface water is not an established environment. Surface water is reportedly present only during precipitation events. A surface soil station and a hydropunch/soil boring will be located in the vicinity of this feature. The gulley drains into pond 11. Surface water and sediment samples will be collected from Pond 11 as part of the investigation at SSA-19.

3. At LANTDIV's direction, Baker will prepare a detailed Standard Operating Procedure (SOP) for use of the continuous soil sampler. Comments submitted by USEPA and VDEQ, to date, have not requested and SOP for this technique.

4. The symbol marking previous soil sampling locations will be corrected to match the legend on Figure 4-1. Three surface soil samples will be collected at SSA-2. These locations will be included on Figure 4-1.

5. The soil boring samples at SSA-17 will be collected from near surface, just above the water table, and from an intermediate interval selected in the field. The text will be revised to reflect this.

6. Railroad track drainage ditches are present along the western boundary of SSA-18. Surface water is not an established environment in the ditches. The ditch floors are comprised of slag from the railroad bed and other fill material. At LANTDIV's direction, Baker will include a discussion of why no surface water/sediment samples are proposed for SSA-18. Comments submitted by USEPA and VDEQ, to date, have not requested this information.

7. The SSA-19 boundries will be marked on Figure 4-4.

8. The use of a TIMCO™ Insta-Pack® is proposed for use with each hydropunch/temporary peizometer. The Insta-Pack® is PVC screen-within-a-screen unit that is filled in the field with clean sand or gravel. A diagram of this unit is included as Figure A-1.

   The major advantage of this device is that it is constructed of the same materials as standard monitoring wells and peizometers (PVC). This alleviates any concern regarding absorption and/or absorption of contaminants that could be raised by the use of a filter-sock or other similar commonly used filter fabrics.

   The Insta-Pack®, however is more costly than the various filter fabrics. Baker estimates that use of the Insta-Pack® would add an additional $100.00 to the cost of hydropunch/temporary peizometer installation. The filter fabrics are estimated to add less than $10.00 additional to the cost of these installations.

ATTACHMENT D
USEPA, VDEQ and LANTDIV
Comments to the Draft Work Plan
Site Screening Process for SSAs 2, 17, 18 and 19
Naval Weapons Station Yorktown

ATTACHMENT D
USEPA, VDEQ and LANTDIV
Comments to the Draft Work Plan
Site Screening Process for SSAs 2, 17, 18 and 19
Naval Weapons Station Yorktown

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Office of Superfund
Robert Thomson, P.E.
Mail Code 3HW71

Direct Dial (215) 597-1110
FAX (215) 597-9890

Date: October 31, 1994

Ms. Brenda Norton, PE
Atlantic Division, Naval Facilities Engineering Command
Environmental Quality Division
Code: 1822
Building N 26, Room 54
1510 Gilbert Street
Norfolk, Va 23511-2699

Re: Naval Weapons Station, Yorktown, Va.
Site- Screening Areas 2, 17, 18, and 19
Review of draft *Work Plan*

Dear Ms. Norton:

The U.S. Environmental Protection Agency (EPA) has reviewed the Navy's draft *Work Plan* for the investigation of Site-Screening Areas 2, 17, 18, and 19 located at the Naval Weapons Station-Yorktown (WPNSTA) NPL facility. Based upon that review, EPA has the following comments to offer on the draft document:

GENERAL COMMENTS

1. The locations of the UST at SSA 17 and 18 need to be clearly shown on maps and figures included in the final *Work Plan*.

2. The sampling design proposed for the Mark 46 Torpedo Support Facility is generally adequate. However, EPA recommends collecting a sample from northwest of the perimeter fence. This location may be used as background if the gradient moves toward the southeast, as reported in the text. In addition, more than one soil boring location should be used to collect data on subsurface soils. At least one boring location should be chosen as background to compare results with the proposed soil boring location.

3. The sampling design proposed for the Mark 48 Torpedo Support Facility should also include a background sampling location. A location east of the perimeter fence should be sampled to cover the full perimeter. On page 4-5, it was stated that previous investigations conducted in this area indicated that the subsurface soils and groundwater were impacted by releases from Site activities. If subsurface soils are impacted, additional sampling of subsurface soils should be included in the final *Work Plan*. Currently, only surface soils and groundwater sampling are proposed for this area.

4. The information provided for the sampling design in Section 4.4 for the Explosive Ordnance Disposal Area does not match the information provided in Table 4-4. The text states that a total of 24, 15, and 5 samples will be collected for sediments, subsurface soils, and groundwater, respectively; however, Table 4-4 shows that a total of 22, 18, and 6 samples will be collected for sediments, subsurface soils, and groundwater, respectively. The text describes 5 sediment locations for both Ponds 10 and 11, and 2 sediment locations for Pond 10A. For each sediment sampling location, samples from two depths

will be collected. Therefore, the total number of samples collected will be 24 (12 X 2). Figure 4-4 purportedly represents the sampling locations for each media. The proposed surface water and sediment locations cannot be determined from this figure due to overlapping color schemes. Perhaps a number code could be used to clarify the picture.

5. Although the first statement in 4.4.2 states that 6 soil borings will be advanced, only 5 soil boring locations are described. However, 6 soil boring locations are depicted in Figure 4-4. The document states that 3 samples will be collected from each boring: one from the surface, one from just above the water table, and one from between the two samples. If the sample being collected from the surface sample is collected from a depth of 0-6 inches, it should be stated and considered a surface soil sample (as in Section 4.1.1), and not a subsurface soil sample. However, if the above sample is collected below this depth, soil samples from this area should also be collected from 0-6 inches. On page 4-10, it is also stated that the planned locations for the soil borings will be downgradient of Site operations. EPA recommends selecting the background sampling location from an area which is upgradient of Site operations.

SPECIFIC COMMENTS

1. Page 2-2. Section 2.1.2 - The description of SSA 2 - Former EOD Burning/Disposal Area

   The final *Work Plan* should include a discussion of the removal action activities conducted by OHM which have occurred prior to the performance of this SSA investigation. It is our understanding that the removal action activities began in July, 1994. This is very important to the selection of a sampling scheme, as the ground may have clean fill where samples are currently planned.

2. Page 2-2. Section 2.1.3

   The results of the integrity test which is described in the last paragraph is somewhat misleading because a hydrostatic integrity test reports the leak rate of the entire system, including normally empty lines, which are stressed under hydrostatic pressure. The final *Work Plan* should simply state that the tank system failed a hydrostatic integrity test. Additional information concerning the leak test would assist this investigation, such as, the location of the leak; the results of a retest, if one was performed; and any remedial work performed on the tank as a result of the tank test results.

3. Page 2-4. Section 2.2.1

   The previous investigation conducted at SSA 2 - Former EOD Burning/Disposal Area, should be named or referenced. The reviewer was not aware that any work had been performed at SSA 2.

4. Page 3-1. Section 3.1

   Otto Fuel contains propylene glycol dinitrate (PGDN), 2-nitrodiphenylamine, and dibutyl sebacate. The importance and impacts of the Otto Fuel constituents, in addition to PGDN, should be considered in the risk screening.

5. Page 3-1. Section 3.1

   Please specify whether residential or industrial soil Risk Based Screening COC Table values will be used for evaluation.

6. Page 3-1. Section 3.1

If frequent low level (?) detections of contaminants are found in downgradient or downstream locations, the possibility of source areas being upgradient or upstream should be evaluated. Also, please define low level detections.

7. Page 4-2. Section 4.1.1

The sampling plan for SSA 2 should be coordinated with OHM, especially in areas where confirmation soil samples are located in areas of recent regrading and backfilling. If the confirmation sampling locations are located in areas of regrading or backfilling, the confirmation samples should be taken at a depth of 0 to 6 inches below the regraded area or backfill to insure that the original site is being sampled, not backfill soil.

8. Page 4-2, Section 4.1.1

The sampling design information described in Section 4.1 for the Former EOD (Explosive Ordnance Disposal) Burning/Disposal Area does not match the information provided in Table 4-1. The text states that a total of 6 surface soils, 6 subsurface soils, and 3 groundwater samples will be collected; however, Table 4-1 shows that a total of 3 surface soils, 9 subsurface soils, and 3 groundwater samples will be collected. Figure 4-1 purportedly represents the sampling locations for surface soils, subsurface soils, and groundwater samples. Only one of the three proposed surface soil samples is depicted. The three proposed soil borings/hydropunch locations are accurately shown. If the soil boring location in the upgradient position near Beaver Road is proposed as a background location, it should be stated. If this was not chosen as a background location, then an appropriate background location should be selected.

9. Page 4-4, section 4.1.4

The use of a filter sock on the temporary piezometers should be evaluated and described in the report if it is going to be used.

10. Page 4-7, Section 4.3.2

The number of existing monitoring wells at SSA 18 appears to conflict with Table 2-2 and Figure 4-3.

11. Page 4-7, Section 4.3.2

Handling of purge and decontamination water should be described.

12. Page 4-8, Section 4.4.1

Pond 12 appears to receive runoff flowing west from the EOD area. This section references pond 10 instead.

13. Page 4-8, Section 4.4.1

This section describes only three surface water samples, while figure 4-4 shows four locations.

14. Page 4-9, section 4.4.1

This section describes five locations for sediment sampling, while figure 4-4 identifies only three locations for sediment sampling at pond 11 along the western shore line.

15. Page 4-11, Section 4.4.3

This section describes three Hydropunch locations while figure 4-4 shows six Hydropunch locations.

16. Figure 4-4

Please show the location of detonation holes 1 and 2 on Figure 4-4.

This concludes EPA's comments on the review of the Navy's draft *Work Plan* for the investigation of Site-Screening Areas 2, 17, 18, and 19 located at the WPNSTA. If you have any questions, please feel free to call me at (215) 597-1110,

Sincerely,

Robert Thomson

Robert Thomson, PE
VA/WV Superfund Federal Facilities (3HW71)

cc: Jeff Harlow (WPNSTA, Code 09E32)
Stephen Mihalko (VDEQ, Richmond)
Andy Rola (BVWST, Phila.)
Bruce Rundell (USEPA, 3HW13)
Nancy Rios (USEPA, 3HW13)
Bob Davis (USEPA, 3HW13)

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Peter W. Schmidt
Director

P. O. Box 10009
Richmond, Virginia 23240-0009
(804) 762-4000

November 18, 1994

Commander
Atlantic Division
Naval Facilities Engineering Command
1510 Gilbert Street
ATTN: CODE 1822, Mr. Greg Hatchet
Norfolk, VA 23511-2699

Re: "Draft Work Plan Site Screening Areas 2, 17, 18, and 19", Naval Weapons Station Yorktown, Yorktown, Virginia.

Dear Mr. Hatchet:

The Department of Environmental Quality's Waste Division is in receipt of the "Draft Work Plan Site Screening Areas 2, 17, 18, and 19" for the Naval Weapons Station Yorktown, Yorktown, Virginia. Attached are questions and comments concerning this document.

If you have any questions please contact me at (804) 762-4232. Thank you for your cooperation.

Sincerely,

Scott McMillian
Federal Facilities Program

CC: Jennifer Loftin (WPNSTA Yorktown)
Rob Thomson (EPA Region III)
Erica Dameron (DEQ)

NAVY CLEAN

Date Received: 11/18/94
Project Manager: DCS
CTO Number: 267
bcc: PRGM F (orig.): Hoff / Tribe
Subfile No.: 8

COMMENTS
DRAFT WORK PLAN SSAs 2, 17, 18, AND 19
WPNSTA YORKTOWN

1. Please include what parameters the soil samples were analyzed for at SSA 17 within section 2.2.2.

2. Table 2-1 includes a column labeled 'Regulatory Level'. Please include where these levels were obtained.

3. SSA 18 had a RCRA closure and post-closure plan filed. Does SSA 17 (also a leaking waste Otto fuel UST) also need such plan?

4. Section 3-1: Some compounds have a strong affinity for solids/particulates. If a sample indicates high unfiltered values and low filtered water column values, this may be more indicative of the nature of the contaminant.

5. Ecological COPCs are addressed in a very general way. Specific criteria need to be included-criteria for selecting compounds of potential concern for ecological impact.

6. On page 3-1, it is stated that chemicals may be eliminated from consideration as COPCs when they are not present as a hot spot. What qualifies as not being present as a hot spot?

7. Page 3-2: Not comparing ecological COPCs (surface water and sediment) to risk based concentrations assumes that all standards are only ecological, not human-health oriented.

8. Page 3-2: Consideration of the inhalation exposure pathway should depend on the parameter. It should not be ignored. Inhalation of fumes and contaminated dusts should be considered.

9. Section 3-2: This section indicates that the fish (tissue) ingestion pathway will be evaluated by targeting compounds which exceed criteria or standards whose exceedances will be considered in conjunction with bioconcentration factors. The bioconcentration factors for some compounds (as determined by experimentation) may not be appropriate. There may be variation in measured BCFs in the literature due to inappropriate experimental conditions or poor analytical measurements. One of the major problems with experimentally derived BCFs is that the experiment was not conducted until the organisms reached steady state. As an alternative, BCFs can be calculated using the octanol water partition coefficient for the compound of interest. This is a commonly accepted approach and is recommended by EPA via the guidance documents for assessing bioconcentratable contaminants in water.

It is important to note that certain compounds have high partition coefficients or BCFs, but may not be detectable with routine analytical methods at concentrations which could be taken up by fish. For instance, compounds like PCBs which have a surface water quality standard of 0.00044 ug/l, may not be detected by the analytical lab at this concentration. If exceedances of water quality standards is the trigger for additional evaluation of bioaccumulation, then chemical analysis should be conducted at the level of the surface water standard. As an alternative to this situation, rather than conducting a chemical screen of water samples, a tissue sampling investigation could be conducted for the same target anlaytes as selected for water analysis. Tissue levels could be factored into risk determinations.

10. Section 3.4.3: The Virginia Water Quality Standards include standards for the protection of human due to the consumption of potentially contaminated tissue. Therefore, in determining the ecological index, Virginia's water quality standard for the protection of "All other surface waters" should be used, rather than the chronic water quality criterion.

11. Figure 4-2 should depict exactly where the UST is located.

12. Figure 4-3 should be enlarged to make it more legible. It should also depict exactly where the UST is located.

13. Page 4-8 states that one of three samples collected from both Ponds 10 and 11 will be collected from a point along the shore line opposite of SSA 19 and used as a SSA specific background sample. These ponds do not appear large enough to consider samples from the opposite side as background.

14. It is stated on page 4-11 that hydropunch sampling procedures will be used to collect groundwater samples from each of the three soil boring locations presented on Figure 4-4. Both Figure 4-4 and page 4-11 refer to six soil borings. Please make necessary corrections.

22 NOV 94
DCS
267
RHOFF / MTANAL
Correspondence

Memorandum

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 2
To RICH HOFF	From G.P. WATCHETT
Co. BAKER	Co. LANTDIV
Dept.	Phone # (804)322-4589
Fax # (412)269-2002	Fax # (804)322-4805

and 19

I have reviewed the document *Preliminary Draft Work Plan, Site Screening Areas 2, 17, 18, and 19, Naval Weapons Station Yorktown* prepared by Baker Environmental, Inc., dated Sept. 14, 1994. The following comments should be addressed before proceeding with remedial activities.

2.2 Results of Previous Investigations (p. 2-4)

1. The Work Plan should indicate whether previous groundwater metals analysis at any of the sites was total or dissolved so that data obtained during previous investigations can be compared to data obtained during the current investigation.

4.1 SSA 2 - Former EOD Burning/Disposal Area (p. 4-1)

2. A surface drainage feature is indicated on Fig. 4-1. The report should indicate why no surface water/sediment samples are planned here.

3. A more detailed SOP for use of the continuous soil sampler should be included in the Work Plan. Reviewing agencies may require documentation that this technique is capable of obtaining relatively undisturbed samples that minimize the loss of VOCs and that the results are comparable to standard split spoon sampling techniques.

4. The previous soil sampling locations do not appear to be labelled correctly on Fig. 4-1. The text indicates that three surface soil samples will be obtained but only one additional surface soil sample is included on Fig. 4-1.

4.2 SSA 17 - Mark 46 Torpedo Support Facility (p. 4-4)

5. This section indicates that a soil sample will be obtained from within the water table, As in the other 3 SSAs, the soil samples in the soil borings should be obtained from near surface, just above the water table, and an intermediate interval selected on the basis of visual screening and Hnu readings.

4.3 SSA 18 - Mark 48 Torpedo Support Facility (p. 4-6)

6. This section should indicate why no surface water/sediment samples are planned.

4.4 SSA 19 - EOD Area (p. 4-8)

7. The SSA 19 site boundaries should be clearly marked on Figure 19.

General

8. Nylon mesh screen covers and/or the use of pre-constructed sand packs had been previously discussed for use with the temporary peizometers to aid in improving sample turbidity. Have these techniques been looked into in any greater detail?

Please let me know if you have any questions or if you would like to discuss any of these issues in greater detail.